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# A method and apparatus for creating and managing groups for increasing buying power on the World Wide Web

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## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

This invention is concerned with a method and apparatus for creating and managing consumer-buying groups on the Internet.

### 2. Description of prior Art

Lawrence Lockwood, US patent 5,576,951 describes an in store automated sales and service system. In this system the software generate a personalized sale presentation based on historical user data. Many such systems are already in existence on the Web. See [www.dell.com](http://www.dell.com) or [www.amazon.com](http://www.amazon.com) for some examples. Many of the sales organizations today hold two separate sales channels for direct sales or support. Usually a call center which allows people to call in and talk to a sale person coexist, but is not integrated, with a web site on which the customer can automatically and interactively choose and configure his buy.

Figure 1. describe a typical process by which a consumer will search for the product and look for competitive deals between variety of vendors. Another popular shopping process is by using one of the online auction systems such as uBid.com and eBay.com. In those systems the seller put out a limited quantity of certain items to be sold to the highest bid.

In US patent 5794207 Walker et. al describes a method and apparatus for effectuating bilateral buyer-driven commerce. In this invention the prospective buyers of goods and services communicate a purchase offer globally to potential sellers, for sellers conveniently to search for relevant buyer purchase offers, and for sellers potentially to bind a buyer to a contract based on the buyer's purchase offer.

It is well known that when the buyer buys in large quantity he can receive better pricing. What is missing in the prior art is a method and apparatus to bring together many individual buyers to form a group, which will seek, together, the best deal from the sellers.

It would therefore be desirable to provide methods and apparatus for creating and maintaining groups of buyers.

It would further be desirable to provide the mechanism and tools for the interaction of the buying group and various sellers.

## SUMMARY OF THE INVENTION

The present invention is a method and apparatus for effectuating the creation, lifetime management and eventual dissolution of groups that pursue, or intend to pursue buying of products and services. The present invention allows prospective buyers of goods and services to communicate their desire to create such a group, to set-up the group and to specify the group's objectives, agenda and timing parameters. The invention further facilitates the escalation and final commitment of group members to the purchase order buy the group.

The invention further supports the interactive negotiation with a vendor or multiple vendors by the apparatus or group members, during which process both the group commitment escalates and the vendor's bid for the groups purchase improve.

The invention further supports the notification of both a group of sellers and a group of buyers on bid/commit status of the group

The invention further supports the secured, regulated transmission of an aggregate transaction information package, including information about multiple credit cards. Multiple methods of payments and multiple billing and shipping addresses from a single source to a vendor

The invention may also support the assignment of roles to participants of the group.

These and other objects of the current invention are achieved by providing software package and Web services ("Jointly") capable of:

- Creating groups of buyers.
- Adding new members to an existing group.
- Notifying buyers on pre-negotiated deals for group purchase.
- Notifying various vendors of the group and collecting bids.
- Notifying buyers of existing bids.
- Receiving buyer commitment to buy.
- Closing the deal with the sellers.
- Collecting member payment data.
- Delivery of payment data to selected vendor.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

FIG 1. is an example of prior art.

FIG 2 is an example of High level steps in the formation of a group.

Fig 3 is an example of the communication process when a group is formed.

FIG 4. Is an overview of the process by which customers commitment is acquired.

FIG 5. Is a detailed example of the processes handled by the system controller.

#### **DETAILED DESCRIPTION**

Figure 2 illustrate the process by which a buyer joins a group. A buyer can select private or public groups. Private groups may be controlled via password and id. A company Intranet for example can provide private groups for its employees. Once the buyer has located and entered the web page he can browse or search existing groups to see if any existing group is seeking to purchase the same

product he is looking for. The search can be by product category, geography, vendor or other parameters of the group such as its size and date.

The buyer can also search a database of pre-negotiated group deals. Typically such deals will give the price or discount amount various vendors are willing to give for specific products or product lines for certain group sizes. Sony, for example, may be willing to provide 10% discount on all products for groups bigger than 100 buyers may.

Once a group is found the buyer can join the group by providing his information. If a group does not exist the buyer can create the group by specifying the product he is seeking for. The formation of the group may also contain the steps of specifying price targets or ranges and specifying deadlines for joining the group, getting vendor offers or closing the deal. Once a new group is formed relevant vendors may be notified and friends or other potential buyers may also be notified.

The notification processes through out this invention can be carried out in variety of ways, including but not limited to email, Internet immediate messaging, voice message, bipper and fax. Also the vendors and group member can log into the web site and see the current status at any point.

Figures 4 and 5 illustrate the communication and decision process by which the price negotiation between the group and the sellers is performed. In figure 4 the vendor can either look for active groups or get notified automatically each time a group is formed. The vendors can submit a bid at any time. Bids which are submitted before the formation of the group can specify a pre-negotiated prices and discounts if the group get to a certain size. Group members are notified of the best bids and are making individual commitment decisions.

Figure 5 describes in more details how the interaction between vendors and group members is controlled. All the communication messages are related to a central system controller which runs the software and provide the communication means to the vendors and the group members. This process can be monitored automatically or manually. The system clock, for example, can be used to check for deadlines. The communication to the vendors and members includes current status of the groups including total number of member, number of committed member, current bid etc. The communication from the vendor include new bids. The communication from the members include commitment to buy at the current bid or at a certain price point as well as withdrawn from the group messages.

Once the at least one group member and one vendor have met an agreed bid the deal is closed by collecting transferring payment information to the vendor. The payment information, preferably credit card number, can be collected from the buyer at sign in time or just prior to closing. A check to make sure that the funds are available can be made before submitting the payment or payment information. Alternatively, the payment or payment information can be collected from the individual members and one payment can be forward to the vendor.

Once the deal is closed the group may dissolve, or alternatively some of the member may continue to try for yet better pricing.

It is apparent that, in this invention, a wide range of different working modes can be formed based on the invention without deviating from the spirit and scope of the invention. This invention is not restricted by its specific embodiment.

What is claimed:

1. A method for using a computer to facilitate a transaction between a group of buyers and at least one of sellers, comprising:
  - inputting into the computer a request to purchase an item by a buyer;
  - inputting into the computer additional requests to purchase same item by additional buyers;
  - outputting the collective request to one or more sellers;
  - inputting into the computer a suggested quote from a seller;
  - notifying each of the buyers in the group of the suggest quote and receiving authorization from all buyers interested at buying at this quote;
    - and
  - Collecting and providing a payment to the seller.
2. A method for using a computer to facilitate a transaction between a group of buyers and at least one of sellers, comprising:
  - Pre negotiating with a seller an agreed price or price reduction per at least one group size;
  - inputting into the computer requests to purchase same item by buyers, thereby forming a group;
  - monitoring the group until it matched the group size;
    - and
  - Collecting and providing a payment to the seller.

Fig 1

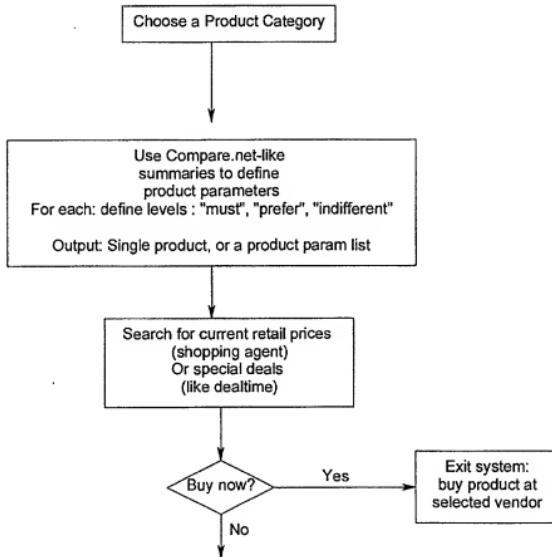


Fig 2

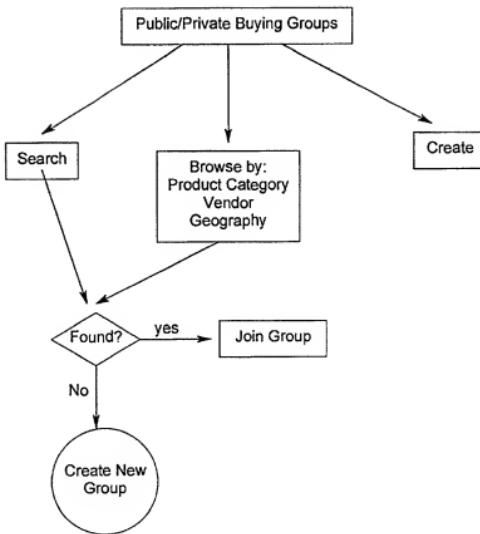


Fig 3

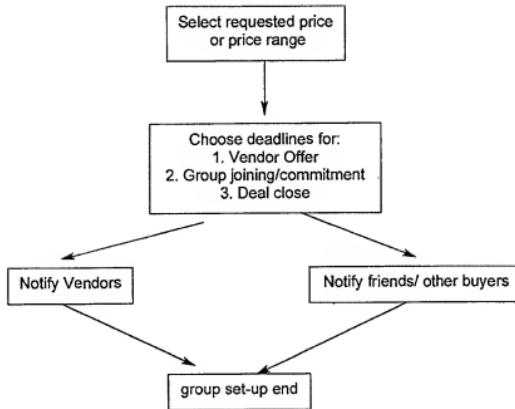


Fig 4: Group/Vendor Interaction

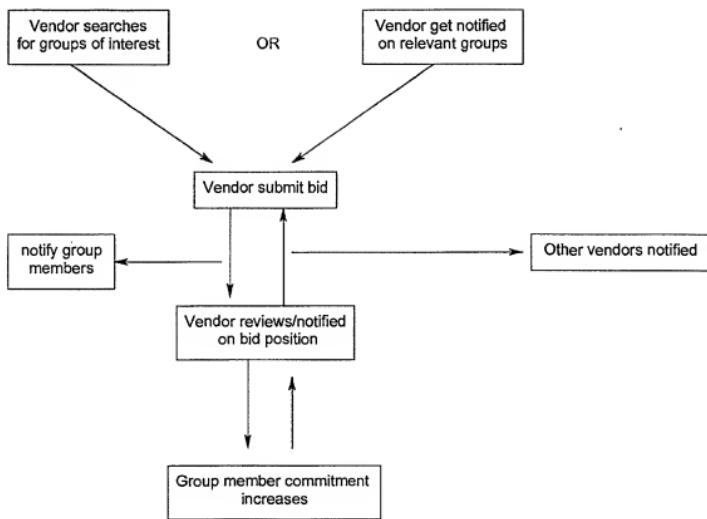


Fig 5: Group Commit Escalation Process

